

PATENT**IN THE CLAIMS:**

Please amend claims 17, 18, 21, 22, 23, 25 and 26 as indicated in the following.

Claims Listing:

1. (Canceled)
2. (Previously Presented) The transceiving unit as recited in claim 28 wherein the baseband processor comprises first and second means for supporting concurrent voice and data communications.
3. (Previously Presented) The transceiving unit as recited in claim 28 wherein each time slot comprises a 32-bit preamble for synchronization, a 64 bit A-field for signaling and a B-field comprising 320 bits and 4 bit for CRC.
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Previously Presented) The transceiving unit as recited in claim 28 wherein unequal amounts of time slots are allocated between voice and data communications.
9. (Previously Presented) The transceiving unit as recited in claim 28 wherein time slots 1,2,3 and 9, 10, 11 are allocated for data communications and time slots 4, 5, 6 and 12, 13, 14 are allocated for voice communications.
10. (Original) The transceiving unit as recited in claim 9 wherein time slot 8 is allocated to program the transmit carrier frequency and slot 16 is allocated to program the receive carrier frequency.

PATENT

11. (Previously Presented) The transceiving unit as recited in claim 9 wherein time slots 1,2,3 and 9, 10, 11 allocate 80 bits in a B field of each time slot to a Forward Error Correction Code (FECC).

12. (Previously Presented) The transceiving unit as recited in claim 9 wherein time slots 4, 5, 6 and 12, 13, 14 allocate an entire B field of each time slot to voice information.

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Currently Amended) A wireless communications method over the industrial-scientific-medical (ISM) spectrum comprising:

- (a) transceiving information in a 2.4 to 2.5 GHz band to support concurrent voice and data information packetized into plural time slots within a time frame, each of the plural time slots being associated with ~~a different one of the at least seventy-five~~ first plurality of carrier frequencies, and each of the plural time slots ~~changes~~ changing to a different one of the at least seventy-five another one of the first plurality of carrier frequencies after a predetermined number of consecutive frames, and wherein at least one time slot of the plural time slots shares at least one of a set of sync bits, a set of signaling bits, a set of CRC bits or a set of FECC bits with at least one adjacent time slot of the plural time slots; and
- (b) a processor to provide time slot and frame timing for step (a) such that ~~at least~~ seventy-five the first plurality of carrier frequencies between 2.4 GHz and 2.4835 GHz and a minimum hop rate of 2.5 hops per second are maintained.

18. (Currently Amended) The method as recited in claim 17 further comprising providing time slot and frame timing such that ~~seventy-five carrier frequencies~~ the first plurality

PATENT

of carrier frequencies includes seventy-five carrier frequencies that are programmed ranging between 2401.122 MHz to 2479.813 MHz and spaced 1.063 MHz apart.

19. (Previously Presented) The method as recited in claim 18 further comprising providing time slot and frame timing such that each of the seventy-five carrier frequencies supports a ten-millisecond frame.

20. (Currently Amended) A system for wireless communications over the industrial-scientific-medical spectrum comprising:

- (a) a base station unit having a first transceiving unit;
- (b) a cordless personal access device having a second transceiving unit; and,
- (c) the first and second transceiving units including:
 - (i) an RF sub-module for transceiving information in a 2.4 to 2.5 GHz band;
~~and~~and
 - (ii) a processor coupled and adapted to provide time slot and frame timing to the RF sub-module wherein ~~at least seventy-five~~ a first plurality of carrier frequencies between 2.4 GHz and 2.4835 GHz and a minimum hop rate of 2.5 hops per second are maintained and to support a frame that has sixteen time slots that change carrier channels after two consecutive frames, wherein at least one time slot of the frame shares at least one of a set of sync bits, a set of signaling bits, a set of CRC bits or a set of FECC bits with at least one adjacent time slot of the frame.

21. (Currently Amended) A method comprising:

- (a) determining a current frame of ~~at least seventy-five frames~~ a first plurality of frames to transmit data to a target device, each frame of the ~~at least seventy-five~~ first plurality of frames residing at a unique carrier range in a 2.4 to 2.5 GHz band;
- (b) determining data to be transmitted over a plurality of time slots of the current frame, wherein at least one time slot of the plurality of time slots shares at least one of a set of sync bits, a set of signaling bits, a set of CRC bits or a

PATENT

set of FECC bits with at least one adjacent time slot of the plurality of time slots;

(c) determining a different frame of the ~~at least seventy-five~~first plurality of frames, wherein the different frame and the current frame are not the same frame; and

(d) identifying the different frame as the current frame after a predetermined number of frame cycles, and repeating (b), (c) and (d).

22. (Previously Presented) The method of claim 21 wherein the plurality of time slots is sixteen time slots.

23. (Currently Amended) The method of claim 22, wherein ~~each frame of the at least seventy-five frames is the~~first plurality of frames includes seventy-five frames spaced 1.063 MHz apart.

24. (Previously Presented) The method of claim 23, wherein each frame has a ten-millisecond duration.

25. (Currently Amended) The method of claim 21, wherein the first plurality of frames includes seventy-five frames ~~each frame of the at least seventy-five frames is~~ spaced 1.063 MHz apart.

26. (Currently Amended) The method of ~~claim 21~~claim 25, wherein each frame has a ten-millisecond duration.

27. (Previously Presented) The method of claim 28, wherein the predetermined number of consecutive frames is two.

28. (Previously Presented) A transceiving unit for wireless communications over the industrial-scientific-medical (ISM) spectrum comprising:

(a) an RF sub-module for transceiving information in a predefined frequency band; and

PATENT

(b) a processor coupled and adapted to provide time slot and frame timing to the RF sub-module, wherein N hopping frequencies ranging between X MHz and Y MHz and a minimum hop rate of Z hops per second are maintained, the N hopping frequencies are spaced K MHz apart and each of the N hopping frequencies support an R millisecond frame having M time slots that change carrier signals after a predetermined number of consecutive frames, and wherein at least one time slot of the frame shares at least one of a set of sync bits, a set of signaling bits, a set of CRC bits or a set of FECC bits with at least one adjacent time slot of the frame, and wherein N and M are integers and K , R , X and Y are real numbers.

29. (Previously Presented) The transceiving unit of claim 28, wherein N is 75, M is 16 and Z is approximately 2.5.

30. (Previously Presented) The transceiving unit of claim 29, wherein K is approximately 1.063, R is approximately 10, X is approximately 2401.122 and Y is approximately 2479.813.